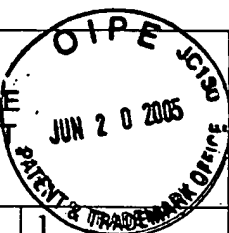


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| Substitute form 1449A/PTO   |                        | <b>Complete if Known</b> |                    |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(use as many sheets as necessary) |                        | Application Number       | 10/651,877         |
|   |                        | Filing Date              | August 29, 2003    |
|   |                        | First Named Inventor     | Young-Nam Hwang    |
|   |                        | Group Art Unit           | 2822               |
|   |                        | Examiner Name            | Michael Manh Trinh |
| Sheet 1 of 1  | Attorney Docket Number | 5649-1148                |                    |



| U.S. PATENTS AND PATENT PUBLICATIONS |          |                      |                         |   |   |
|--------------------------------------|----------|----------------------|-------------------------|---|---|
| Examiner Initials*                   | Cite No. | U.S. Patent Document |                         | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document<br>MM-DD-YYYY |
|                                      |          | Number               | Kind Code<br>(if known) |   |   |
| MT                                   | 1.       | US-2001/0049189      |                         | Zahorik   | 12-06-2001  |
| MT                                   | 2.       | US-2002/0045323      |                         | Lowrey et al.                                   | 04-18-2002  |
| MT                                   | 3.       | US-2002/0081807      |                         | Xu  | 06-27-2002  |
| MT                                   | 4.       | US-3,401,318         |                         | Jensen  | 08-10-1968  |
|                                      |          | US-                  |                         |   |   |
|                                      |          | US-                  |                         |   |   |

| FOREIGN PATENT DOCUMENTS |          |                         |           |                         |   |   |             |
|--------------------------|----------|-------------------------|-----------|-------------------------|---|---|-------------|
| Examiner Initials*       | Cite No. | Foreign Patent Document |           |                         | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document<br>MM-DD-YYYY | Translation |
|                          |          | Office                  | Number    | Kind Code<br>(if known) |   |   |             |
| MT                       | 5.       | EP                      | 1 339 110 | A1                      | STMicroelectronics                              | 08-27-2003  |             |
| MT                       | 6.       | DE                      | 39 27 033 | A1                      | Seiko Epson Corp.                               | 03-01-1990  | Abstract    |
|                          |          |                         |           |                         |   |   |             |
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|                          |          |                         |           |                         |   |   |             |

| OTHER NON PATENT LITERATURE DOCUMENTS |          |  |     |
|---------------------------------------|----------|--|-----|
| Examiner Initials*                    | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T   |
| MT                                    | 7.       | German Office Action for German Application No. 103 51 017.6-33 on April 20, 2005  | yes |
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|--------------------|---------------|-----------------|---------|
| Examiner Signature | Michael Trinh | Date Considered | 8/24/05 |
|--------------------|---------------|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.